

Claims

- [c1] What is claimed is:
1. A method of reproducing a media file with a control apparatus, the media file comprising a plurality of frames, each frame having an optional error check field, and an audio data field for storing encoded audio sample, the control apparatus including a parameter, the method comprising:
if the error check field of the frame exists, using the error check field to verify integrity of the frame; if the integrity of the frame is correct, decoding the audio sample in the audio data field; if the integrity of the frame is unable to be confirmed to be correct and the parameter indicates that the error check field no longer needs to be used to verify the integrity of the frame, decoding the audio sample in the audio data field; if the integrity of frame is unable to be confirmed to be correct and the parameter indicates that the error check field is to be used to verify the integrity of the frame, storing the audio data field for later reference without decoding the audio sample stored in the audio data field.
 - [c2] 2. The method of claim 1 wherein a first predefined constant is used as a destructive factor in calculations determining whether or not to continue using the error check field to verify the integrity of the data within the frame.
 - [c3] 3. The method of claim 2 wherein a second predefined constant is used as a constructive factor in calculations determining whether or not to continue using the error check field to verify the integrity of the data within the frame.
 - [c4] 4. The method of claim 3 wherein the parameter is a totalizer for accumulating the constructive and destructive factors utilized during processing of the media file so that when the value held in the totalizer is less than a predetermined threshold, the method continues using the error check field to verify the integrity of the data within the frame and when the value held in the totalizer is greater than or equal to the predetermined threshold, the error check field is not to be used to verify the integrity of the data within the frame.
 - [c5] 5. The method of claim 4 wherein the totalizer is a variable, a register, or a counter.

- [c6] 6. The method of claim 1 wherein the area of the frame capable of being verified as correct by the control apparatus excludes the error check field.
- [c7] 7. The method of claim 1 wherein the media file is an MP3 file.
- [c8] 8. The method of claim 1 wherein the control apparatus is implemented by a circuit or an algorithm.
- [c9] 9. An apparatus for decoding and outputting a media file, the media file comprising a plurality of frames, the apparatus comprising:
a control apparatus capable of decoding and outputting audio data of the frame if integrity of the audio data of the frame is not verifiable by the control apparatus using an error check field of the frame, and capable of using the error check field of the frame for error checking if the integrity of the audio data of the frame is verifiable by the control apparatus using the error check field of the frame when decoding and outputting the audio data of the frame.
- [c10] 10. The apparatus of claim 9 further comprising a parser for parsing a frame in the MP3 file, a decoder for decoding data within the frame, and a buffer for storing audio data of the frame.
- [c11] 11. The apparatus of claim 9, wherein the control apparatus is implemented by a circuit or an algorithm.